

Appl. No. 09/847,072
Amdt. Dated May 10, 2004
Reply to Office action of March 10, 2004
Attorney Docket No. P12678-US1
EUS/J/P/04-3104

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A method of providing wireless services to a mobile terminal within a common service area serviced by both a public land mobile network (PLMN) and an Internet Protocol (IP), comprising the steps of:

responsive to a request, to the IP network for service, from the mobile terminal, which is roaming from the PLMN.

utilizing a network access controller (NAC) associated with the IP network for emulating a mobile switching center/visitor location register (MSC/VLR) for

registering the mobile terminal with the PLMN home location register (HLR) via an IP network radio base station and an H.323 gatekeeper/service node (SN), wherein the IP network lacks an associated HLR and said SN includes a service layer for providing wireless services associated with the common area; and

providing the requested service to the mobile terminal upon confirmation from the wireless network of eligibility for the requested service .

2. (Canceled)

3. (Previously Presented) The method of claim 1 further comprising the step of the mobile terminal performing a location update with the IP network utilizing the IP network radio base station.

4. (Original) The method of claim 1 further comprising the step of the IP network registering the mobile terminal with the wireless network.

5. (Previously Presented) The method of claim 1 further comprising the step of the IP network registering the mobile terminal in an IP Network Mobile Services Center/Visitor Location Register (MSC/VLR).

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6. (Previously Presented) The method of claim 1 further comprising the step of the IP network MSC/VLR connecting with the PLMN HLR for registering the mobile terminal.

7. (Previously Presented) The method of claim 1 further comprising the step of the wireless HLR providing the list of services associated with the common area to the IP network MSC/VLR, for which the mobile terminal is eligible.

8. (Currently Amended) A telecommunications system for providing wireless services to a mobile terminal within a common service area serviced by both a public land mobile network (PLMN) and an Internet Protocol (IP) network, comprising:

31 the Public Land Mobile Network (PLMN) including an associated home location register (HLR) configured to provide wireless service to mobile terminals throughout a specified service area;

the Internet Protocol network, lacking an associated HLR and, adapted to provide service to the mobile terminal within the common service area, wherein said IP network comprises:

a radio base station (RBS) for connecting connected to the associated HLR ~~a home location register~~ in said PLMN via

an IP network base station controller,

a network access controller for emulating a mobile switching center/visitor location register (MSC/VLR), [[and]]

a H.323 gatekeeper/service node (SN), all located in the ~~shared~~ common service area; and

an interface for operably coupling the Internet Protocol (IP) network to the PLMN, wherein said IP network is configured to detect service requests from mobile terminals associated with the PLMN and wherein said SN is further configured to provide services associated with said common service area to said mobile terminals.

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9. (Original) The system according to claim 8 wherein the IP network utilizes H.323 protocol.

10. (Previously Presented) The system according to claim 8 wherein the PLMN is a Global System for Mobile communication (GSM) network.

11. (Currently Amended) The system according to claim 8 wherein the RBS is configured to provide an air interface to mobile terminals of the PLMN.

B | 12. (Previously Presented) The system according to claim 11 wherein the Network Access Controller (NAC) is configured to provide the functions of a Mobile Switching Center/Visitor Location Register enabling registration of mobile terminals with a PLMN home location register (HLR) and H.323 procedures towards the H.323 Service node.

13. (Previously Presented) The system according to claim 12 wherein said H.323 gatekeeper and Service Node (SN) includes a service layer for providing location specific services to mobile terminals, said location specific services related to said shared service area.

14. (Original) The system according to claim 13 wherein said IP network comprises a Radio Network Server configured to provide the base station controller functions of a PLMN within said shared service area.

15. (Currently Amended) An Internet Protocol (IP) network supporting the provision of site-specific services to roaming mobile terminals, in a service area that is common to the IP network and a public land mobile network (PLMN), comprising:

a Radio Base Station (RBS) providing an air interface for coupling a mobile terminal associated with the PLMN to the IP network, wherein the IP network does not have an associated home location register;

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a Network Access Controller (NAC) coupled with the RBS and configured to provide the functions of a Mobile Switching Center/Visitor Location Register (MSC/VLR), wherein said NAC, registers the mobile terminal, in the common service area, with the home location register (HLR) in the PLMN and towards the H.323 Service Node using standard H.323 admission control procedures; and

a H.323 gatekeeper/service node (SN) configured to provide location specific services to said mobile terminal, said location specific services related to the common service area shared by both said PLMN and said IP network.

16. (Previously Presented) The IP network according to claim 15 wherein the RBS further comprises a Base Transceiver Station (BTS).

17. (Original) The IP network according to claim 16 wherein the RBS further comprises an Abis Gateway (AGW).

18. (Original) The IP network according to claim 15 further comprising a Media and Signaling Gateway (MSGW) operably coupled to the NAC.

19. (Original) The IP network according to claim 15 wherein the IP network supports H.323 protocol.

20. (Original) The IP network according to claim 15 wherein the PLMN is a Global System for Mobile communication systems (GSM) network.

21. (Original) The IP network according to claim 16 wherein the IP network is configured to emulate a PLMN base station compatible with the mobile terminal.

22. (Original) The IP network according to claim 16 wherein the IP network emulates a mobile switch compatible with the PLMN.